SPECTRAL FEATURES OF 21 LUTETIA, TARGET OF ROSETTA MISSION.

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The International Rosetta Mission, successfully launched on March 2nd 2004, will encounter comet 67P/Churyumov-Gerasimenko, the principal target of the mission, in 2014. During its long journey Rosetta will fly-by also two asteroids: 2867 Steins (September 2008) at a distance of about 1700 km and at a relatively low speed of about 9 kilometers per second and 21 Lutetia (July 2010) at about 3000 km at a speed of 15 kilometers per second.

Rosetta will try to answer to the main questions related to the origin and evolution of the Solar System as minor bodies contains the record of the chemical, physical and dynamical primordial processes of the formation of our planetary system.

In this work we present the analysis of two visible spectra of Lutetia taken at NTT-ESO, Chile, in order to confirm the presence of absorption bands previously determined on other spectra of the asteroid (Lazzarin et al., A&A, 2004).

In particular, we investigated the spectral region where these bands were detected by using a higher spectral resolution. We confirm a broad complex feature between 0.45 and 0.55 micron and two narrower features around 0.47 and 0.52 micron which possible origin will be discussed.

A more precise knowledge of the surface composition of Lutetia is particularly important for the definition of the observational strategy of the Rosetta mission.